

CLAIMS

1. Cosmetic composition containing a cosmetically acceptable organic liquid medium and a film-forming linear ethylenic block polymer, the said polymer being such that, when it is in sufficient amount in the composition:

- the mean gloss at 20° of a deposit of the said composition, once spread onto a support, is greater than or equal to 30 out of 100, and
- the transfer index of the said composition is less than or equal to 40 out of 100.

2. Cosmetic composition according to the preceding claim, characterized in that the block polymer is a non-elastomeric polymer.

3. Cosmetic composition according to either of the preceding claims, characterized in that the block polymer is an ethylenic polymer derived from aliphatic ethylenic monomers comprising a carbon-carbon double bond and at least one ester group-COO- or amide group -CON- group.

4. Cosmetic composition according to one of the preceding claims, characterized in that the block polymer is not soluble at an active material content of at least 1% by weight in water or in a mixture of water and of linear or branched lower monoalcohols containing

from 2 to 5 carbon atoms, without pH modification, at room temperature (25°C).

5. Cosmetic composition according to one of the preceding claims, characterized in that the block
5 polymer contains first and second blocks linked together via an intermediate segment comprising at least one constituent monomer of the first block and at least one constituent monomer of the second block.

6. Cosmetic composition according to one of
10 the preceding claims, characterized in that the block polymer contains first and second blocks with different glass transition temperatures (T_g).

7. Composition according to Claim 6,
characterized in that the difference between the glass
15 transition temperatures (T_g) of the first and second blocks is greater than 10°C, better still greater than 20°C, preferably greater than 30°C and better still greater than 40°C.

8. Composition according to Claim 6 or 7,
20 characterized in that the first and second blocks are linked together via an intermediate segment with a glass transition temperature that is between the glass transition temperatures of the first and second blocks.

9. Cosmetic composition according to any
25 one of the preceding claims, characterized in that the block polymer contains first and second blocks that are

incompatible in the said organic liquid medium.

10. Composition according to one of the preceding claims, characterized in that the transfer index is less than or equal to 30, preferably less than 5 or equal to 20, preferably less than or equal to 15, preferably less than or equal to 10, preferably less than or equal to 5, and more preferably less than or equal to 2 out of 100.

11. Cosmetic composition according to one of 10 the preceding claims, characterized in that the mean gloss measured at 20° of the composition, once spread onto a support, is greater than or equal to 35, better still greater than or equal to 40, better still greater than or equal to 45, better still greater than or equal 15 to 50, better still greater than or equal to 55 and better still greater than or equal to 60.

12. Cosmetic composition according to one of the preceding claims, characterized in that the mean gloss of the composition, once spread onto a support, 20 measured at 60° is greater than or equal to 50, better still greater than or equal to 60, better still greater than or equal to 65, better still greater than or equal to 70, better still greater than or equal to 75, better still greater than or equal to 80, better still greater 25 than or equal to 85 or better still greater than or equal to 90 out of 100.

13. Cosmetic composition according to one of the preceding claims, characterized in that the mean gloss of the composition, once spread onto a support, measured at 20° is greater than 35, preferably 40, 45
5 or 50 out of 100, and/or the mean gloss of the composition, once spread onto a support, measured at 60° is preferably greater than 65, 70 or 75 out of 100.

14. Cosmetic composition according to one of the preceding claims, characterized in that the block
10 polymer has a polydispersity index I of greater than 2.

15. Composition according to Claim 14, characterized in that the block polymer has a polydispersity index of greater than or equal to 2.5, preferably greater than or equal to 2.8 and preferably
15 between 2.8 and 6.

16. Composition according to one of the preceding claims, characterized in that the block polymer has a weight-average mass (Mw) of less than or equal to 300 000.

20 17. Composition according to Claim 16, characterized in that the weight-average mass (Mw) ranges from 35 000 to 200 000 and better still from 45 000 to 150 000.

18. Composition according to Claim 17,
25 characterized in that the number-average mass (Mn) is less than or equal to 70 000.

19. Composition according to one of Claims 16 to 18, the number-average mass (M_n) of which ranges from 10 000 to 60 000 and better still from 12 000 to 50 000.

5 20. Composition according to one of the preceding claims, characterized in that it comprises from 0.1% to 60% by weight of active material, preferably from 5% to 50% by weight and more preferably from 10% to 40% by weight, of polymer.

10 21. Cosmetic composition according to one of the preceding claims, characterized in that it contains less than 30%, preferably less than 25%, less than 20% and better still less than 15% by weight of at least one glossy oil.

15 22. Composition according to Claim 6 or any of the preceding claims dependent thereon, characterized in that the first block of the polymer is chosen from:

- 20 - a) a block with a T_g of greater than or equal to 40°C,
- b) a block with a T_g of less than or equal to 20°C,
- c) a block with a T_g of between 20 and 40°C, and the second block is chosen from a category a), b)
- 25 or c) different from the first block.

23. Composition according to Claim 22,

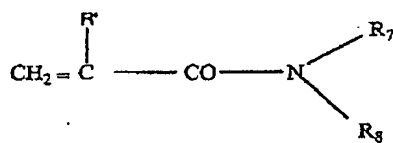
characterized in that the block with a Tg of greater than or equal to 40°C is totally or partially derived from one or more monomers, which are such that the homopolymer prepared from these monomers has a glass transition temperature of greater than or equal to 40°C.

24. Composition according to the preceding claim, characterized in that the monomers whose corresponding homopolymer has a glass transition temperature of greater than or equal to 40°C are chosen from the following monomers:

- methacrylates of formula $\text{CH}_2 = \text{C}(\text{CH}_3)\text{-COOR}_1$ in which R_1 represents a linear or branched unsubstituted alkyl group containing from 1 to 4 carbon atoms, such as a methyl, ethyl, propyl or isobutyl group or R_1 represents a C_4 to C_{12} cycloalkyl group,

- acrylates of formula $\text{CH}_2 = \text{CH-COOR}_2$ in which R_2 represents a C_4 to C_{12} cycloalkyl group such as isobornyl acrylate or a tert-butyl group,

- (meth)acrylamides of formula:



in which R_7 and R_8 , which may be identical or

different, each represent a hydrogen atom or a linear or branched alkyl group containing from 1 to 12 carbon atoms, such as an n-butyl, t-butyl, isopropyl, isohexyl, isooctyl or isononyl group; or R₇ represents H and R₈ represents a 1,1-dimethyl-3-oxobutyl group, and R' denotes H or methyl, - and mixtures thereof.

25. Composition according to Claim 23 or 24, characterized in that the monomers whose corresponding homopolymer has a glass transition temperature of greater than or equal to 40°C are chosen from methyl methacrylate, isobutyl (meth)acrylate and isobornyl (meth)acrylate, and mixtures thereof.

26. Composition according to Claim 25, characterized in that the block with a T_g of less than or equal to 20°C is totally or partially derived from one or more monomers, which are such that the homopolymer prepared from these monomers has a glass transition temperature of less than or equal to 20°C.

27. Composition according to Claim 26, characterized in that the monomers whose corresponding homopolymer has a glass transition temperature of less than or equal to 20°C are chosen from the following monomers:

- acrylates of formula $\text{CH}_2 = \text{CHCOOR}_3$,

R_3 representing a linear or branched C_1 to C_{12} unsubstituted alkyl group, with the exception of the tert-butyl group, in which one or more hetero atoms chosen from O, N and S is (are) optionally
5 intercalated;

- methacrylates of formula $CH_2 = C(CH_3)COOR_4$,
 R_4 representing a linear or branched C_6 to C_{12} unsubstituted alkyl group, in which one or more hetero atoms chosen from O, N and S is (are)
10 optionally intercalated;

- vinyl esters of formula $R_5COOCH = CH_2$
in which R_5 represents a linear or branched C_4 to C_{12} alkyl group;

- C_4 to C_{12} alkyl vinyl ethers,
15 - N-(C_4 to C_{12})alkyl acrylamides, such as
N-octylacrylamide,

- and mixtures thereof.

28. Composition according to Claim 26 or 27,
characterized in that the monomers whose corresponding
20 homopolymer has a glass transition temperature of less
than or equal to $20^\circ C$ are chosen from alkyl acrylates
whose alkyl chain contains from 1 to 10 carbon atoms,
with the exception of the tert-butyl group.

29. Composition according to Claim 22,
25 characterized in that the block with a T_g of between 20
and $40^\circ C$ is totally or partially derived from one or

more monomers, which are such that the homopolymer prepared from these monomers has a glass transition temperature of between 20 and 40°C.

30. Composition according to Claim 22,
5 characterized in that the block with a Tg of between 20 and 40°C is totally or partially derived from monomers; which are such that the corresponding homopolymer has a Tg of greater than or equal to 40°C and from monomers which are such that the corresponding homopolymer has a
10 Tg of less than or equal to 20°C.

31. Composition according to Claim 29 or 30, characterized in that the block with a Tg of between 20 and 40 °C is totally or partially derived from monomers chosen from methyl methacrylate, isobornyl acrylate and
15 methacrylate, butyl acrylate and 2-ethylhexyl acrylate, and mixtures thereof.

32. Composition according to one of Claims 22 to 31, characterized in that it comprises a block polymer comprising at least one first block and at
20 least one second block, the first block having a glass transition temperature (Tg) of greater than or equal to 40°C and the second block having a glass transition temperature of less than or equal to 20°C.

33. Composition according to the preceding
25 claim, characterized in that the first block is totally or partially derived from one or more monomers which

are such that the homopolymer prepared from these monomers has a glass transition temperature of greater than or equal to 40°C.

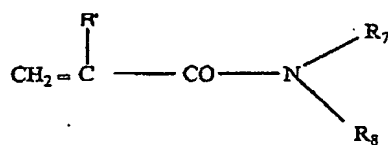
34. Composition according to Claim 33,
5 characterized in that the first block is a copolymer derived from monomers which are such that the homopolymer prepared from these monomers has a glass transition temperature of greater than or equal to 40°C.

10 35. Composition according to Claim 33 or 34, characterized in that the monomers whose corresponding homopolymer has a glass transition temperature of greater than or equal to 40°C are chosen from the following monomers:

15 - methacrylates of formula $\text{CH}_2 = \text{C}(\text{CH}_3)\text{-COOR}_1$
in which R_1 represents a linear or branched unsubstituted alkyl group containing from 1 to 4 carbon atoms, such as a methyl, ethyl, propyl or isobutyl group or R_1 represents a C_4 to C_{12}
20 cycloalkyl group,

- acrylates of formula $\text{CH}_2 = \text{CH-COOR}_2$
in which R_2 represents a C_4 to C_{12} cycloalkyl group such as isobornyl acrylate or a tert-butyl group,

- (meth)acrylamides of formula:



in which R₇ and R₈, which may be identical or different, each represent a hydrogen atom or a linear or branched alkyl group containing from 1 to 12 carbon atoms, such as an n-butyl, t-butyl, isopropyl, isohexyl, isooctyl or isononyl group; or R₇ represents H and R₈ represents a 1,1-dimethyl-3-oxobutyl group, and R' denotes H or methyl,

10 - and mixtures thereof.

36. Composition according to one of Claims 33 to 35, characterized in that the monomers whose corresponding homopolymer has a glass transition temperature of greater than or equal to 40°C are chosen from methyl methacrylate, isobutyl methacrylate and isobornyl (meth)acrylate, and mixtures thereof.

37. Composition according to one of Claims 33 to 36, characterized in that the proportion of the first block ranges from 20% to 90%, better still from 30% to 80% and even better from 50% to 70% by weight of the polymer.

38. Composition according to one of Claims 32 to 37, characterized in that the second block is

totally or partially derived from one or more monomers which are such that the homopolymer prepared from these monomers has a glass transition temperature of less than or equal to 20°C.

5 39. Composition according to one of Claims 32 to 38, characterized in that the second block is a homopolymer derived from monomers which are such that the homopolymer prepared from these monomers has a glass transition temperature of less than or equal to
10 20°C.

 40. Composition according to Claim 38 or 39, characterized in that the monomers whose corresponding homopolymer has a glass transition temperature of less than or equal to 20°C are chosen from the following
15 monomers:

 - acrylates of formula $\text{CH}_2 = \text{CHCOOR}_3$,
 R_3 representing a linear or branched C_1 to C_{12} unsubstituted alkyl group, with the exception of the tert-butyl group, in which one or more hetero
20 atoms chosen from O, N and S is (are) optionally intercalated;

 - methacrylates of formula $\text{CH}_2 = \text{C}(\text{CH}_3)\text{-COOR}_4$,
 R_4 representing a linear or branched C_6 to C_{12} unsubstituted alkyl group, in which one or more
25 hetero atoms chosen from O, N and S is (are) optionally intercalated;

- vinyl esters of formula $R_5\text{-CO-O-CH}=\text{CH}_2$
in which R_5 represents a linear or branched C_4 to
 C_{12} alkyl group;

- C_4 to C_{12} alkyl vinyl ethers,
- 5 - N-(C_4 to C_{12})alkyl acrylamides, such as
N-octylacrylamide,
- and mixtures thereof.

41. Composition according to one of Claims
38 to 40, characterized in that the monomers whose
10 corresponding homopolymer has a glass transition
temperature of less than or equal to 20°C are chosen
from alkyl acrylates whose alkyl chain contains from 1
to 10 carbon atoms, with the exception of the tert-
butyl group.

15 42. Composition according to Claim 41,
characterized in that the monomers whose corresponding
homopolymer has a glass transition temperature of less
than or equal to 20°C are chosen from isobutyl
acrylate, methyl acrylate and 2-ethylhexyl acrylate.

20 43. Composition according to one of Claims
32 to 42, characterized in that the proportion of the
second block with a T_g of less than or equal to 20°C
ranges from 5% to 75%, better still from 15% to 50% and
even better from 25% to 45% by weight of the polymer.

25 44. Composition according to one of Claims
32 to 43, characterized in that it comprises a block

polymer comprising at least one first block and at least one second block, the first block having a glass transition temperature (T_g) of between 20 and 40°C and the second block having a glass transition temperature
5 of less than or equal to 20°C or a glass transition temperature of greater than or equal to 40°C.

45. Composition according to the preceding claim, characterized in that the first block with a T_g of between 20 and 40°C is totally or partially derived
10 from one or more monomers which are such that the homopolymer prepared from these monomers has a glass transition temperature of between 20 and 40°C.

46. Composition according to Claim 44 or 45, characterized in that the first block with a T_g of
15 between 20 and 40°C is a copolymer derived from monomers which are such that the corresponding homopolymer has a T_g of greater than or equal to 40°C and from monomers which are such that the corresponding homopolymer has a T_g of less than or equal to 20°C.

20 47. Composition according to one of Claims 44 to 46, characterized in that the first block with a T_g of between 20 and 40°C is derived from monomers chosen from methyl methacrylate, isobornyl acrylate and methacrylate, butyl acrylate and 2-ethylhexyl acrylate,
25 and mixtures thereof.

48. Composition according to one of Claims

44 to 47, characterized in that the proportion of the first block with a Tg of between 20 and 40°C ranges from 10% to 85%, better still from 30% to 80% and even better from 50% to 70% by weight of the polymer.

5 49. Composition according to any one of Claims 44 to 47, characterized in that the second block has a Tg of greater than or equal to 40°C and is totally or partially derived from one or more monomers which are such that the homopolymer prepared from these
10 monomers has a glass transition temperature of greater than or equal to 40°C.

 50. Composition according to any one of Claims 44 to 49, characterized in that the second block has a Tg of greater than or equal to 40°C and is a
15 homopolymer derived from monomers which are such that the homopolymer prepared from these monomers has a glass transition temperature of greater than or equal to 40°C.

 51. Composition according to either of
20 Claims 49 and 50, characterized in that the monomers whose corresponding homopolymer has a glass transition temperature of greater than or equal to 40°C are chosen from the following monomers:

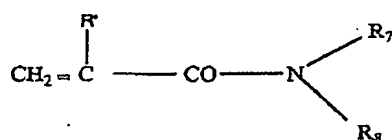
 - methacrylates of formula $\text{CH}_2 = \text{C}(\text{CH}_3) - \text{COOR}_1$
25 in which R_1 represents a linear or branched unsubstituted alkyl group containing from 1 to 4

carbon atoms, such as a methyl, ethyl, propyl or isobutyl group or R_1 represents a C_4 to C_{12} cycloalkyl group,

- acrylates of formula $CH_2 = CH-COOR_2$

5 in which R_2 represents a C_4 to C_{12} cycloalkyl group such as isobornyl acrylate or a tert-butyl group,

- (meth)acrylamides of formula:



10 in which R_7 and R_8 , which may be identical or different, each represent a hydrogen atom or a linear or branched alkyl group containing from 1 to 12 carbon atoms, such as an n-butyl, t-butyl, isopropyl, isohexyl, isooctyl or isononyl group; or R_7 represents H and R_8 represents a
15 1,1-dimethyl-3-oxobutyl group,
and R' denotes H or methyl,

- and mixtures thereof.

52. Composition according to one of Claims 48 to 51, characterized in that the monomers whose
20 corresponding homopolymer has a glass transition temperature of greater than or equal to $40^\circ C$ are chosen from methyl methacrylate, isobutyl methacrylate and isobornyl (meth)acrylate, and mixtures thereof.

53. Composition according to one of Claims 49 to 52, characterized in that the proportion of the second block with a Tg of greater than or equal to 40°C ranges from 10% to 85%, preferably from 20% to 70% and
5 better still from 30% to 70% by weight of the polymer.

54. Composition according to one of Claims 44 to 53, characterized in that the second block has a Tg of less than or equal to 20°C and is totally or partially derived from one or more monomers which are
10 such that the homopolymer prepared from these monomers has a glass transition temperature of less than or equal to 20°C.

55. Composition according to one of Claims 44 to 53, characterized in that the second block has a
15 Tg of less than or equal to 20°C and is a homopolymer derived from monomers which are such that the homopolymer prepared from these monomers has a glass transition temperature of less than or equal to 20°C.

56. Composition according to Claim 54 or 55,
20 characterized in that the monomers whose corresponding homopolymer has a glass transition temperature of less than or equal to 20°C are chosen from the following monomers:

- acrylates of formula $\text{CH}_2 = \text{CHCOOR}_3$,
25 R_3 representing a linear or branched C_1 to C_{12} unsubstituted alkyl group, with the exception of

the tert-butyl group, in which one or more hetero atoms chosen from O, N and S is (are) optionally intercalated;

5 - methacrylates of formula $\text{CH}_2 = \text{C}(\text{CH}_3)\text{-COOR}_4$,
 R_4 representing a linear or branched C_6 to C_{12} unsubstituted alkyl group, in which one or more hetero atoms chosen from O, N and S is (are) optionally intercalated;

10 - vinyl esters of formula $\text{R}_5\text{-CO-O-CH} = \text{CH}_2$
 in which R_5 represents a linear or branched C_4 to C_{12} alkyl group;

 - C_4 to C_{12} alkyl vinyl ethers,
 - $\text{N-(C}_4 \text{ to C}_{12})$ alkyl acrylamides, such as
 N-octylacrylamide,
 15 - and mixtures thereof.

57. Composition according to one of Claims 54 to 56, characterized in that the monomers whose homopolymers have glass transition temperatures of less than or equal to 20°C are chosen from alkyl acrylates
 20 whose alkyl chain contains from 1 to 10 carbon atoms, with the exception of the tert-butyl group.

58. Composition according to one of Claims 54 to 57, characterized in that the proportion of the block with a glass transition temperature of greater
 25 than or equal to 40°C ranges from 20% to 90%, better still from 30% to 80% and even better from 50% to 70%

by weight of the polymer.

59. Cosmetic composition according to Claim 5 or any of the preceding claims dependent thereon, characterized in that the first block and/or the second 5 block comprises at least one additional monomer.

60. Composition according to the preceding claim, characterized in that the additional monomer is chosen from hydrophilic monomers and ethylenically unsaturated monomers comprising one or more silicon 10 atoms, and mixtures thereof.

61. Composition according to Claim 59 or 60, characterized in that the additional monomer is chosen from:

a) hydrophilic monomers such as:

15 - ethylenically unsaturated monomers comprising at least one carboxylic or sulfonic acid function, for instance:

acrylic acid, methacrylic acid, crotonic acid, maleic anhydride, itaconic acid, fumaric acid, maleic acid, 20 acrylamidopropanesulfonic acid, vinylbenzoic acid, vinylphosphoric acid, and salts thereof,

- ethylenically unsaturated monomers comprising at least one tertiary amine function, for instance 2-vinylpyridine, 4-vinylpyridine, dimethylaminoethyl 25 methacrylate, diethylaminoethyl methacrylate and dimethylaminopropylmethacrylamide, and salts thereof,

- methacrylates of formula $\text{CH}_2 = \text{C}(\text{CH}_3) - \text{COOR}_6$
 in which R_6 represents a linear or branched alkyl group
 containing from 1 to 4 carbon atoms, such as a methyl,
 ethyl, propyl or isobutyl group, the said alkyl group
 5 being substituted with one or more substituents chosen
 from hydroxyl groups (for instance 2-hydroxypropyl
 methacrylate and 2-hydroxyethyl methacrylate) and
 halogen atoms (Cl, Br, I or F), such as trifluoroethyl
 methacrylate,
- 10 - methacrylates of formula $\text{CH}_2 = \text{C}(\text{CH}_3) - \text{COOR}_9$,
 R_9 representing a linear or branched C_6 to C_{12} alkyl
 group in which one or more hetero atoms chosen from O,
 N and S is (are) optionally intercalated, the said
 alkyl group being substituted with one or more
 15 substituents chosen from hydroxyl groups and halogen
 atoms (Cl, Br, I or F);
- acrylates of formula $\text{CH}_2 = \text{CHCOOR}_{10}$,
 R_{10} representing a linear or branched C_1 to C_{12} alkyl
 group substituted with one or more substituents chosen
 20 from hydroxyl groups and halogen atoms (Cl, Br, I or
 F), such as 2-hydroxypropyl acrylate and 2-hydroxyethyl
 acrylate, or R_{10} represents a C_1 to C_{12} alkyl-O-POE
 (polyoxyethylene) with repetition of the oxyethylene
 unit from 5 to 30 times, for example methoxy-POE, or
 25 R_{10} represents a polyoxyethylenated group comprising
 from 5 to 30 ethylene oxide units, and

b) ethylenically unsaturated monomers comprising one or more silicon atoms, such as methacryloxypropyltrimethoxysilane and methacryloxypropyltris(trimethylsiloxy)silane,

5 - and mixtures thereof.

62. Composition according to either of Claims 59 and 60, characterized in that each of the first and second blocks comprises at least one additional monomer chosen from acrylic acid,
10 (meth)acrylic acid and trifluoroethyl methacrylate, and mixtures thereof.

63. Composition according to either of Claims 59 and 60, characterized in that each of the first and second blocks comprises at least one monomer
15 chosen from (meth)acrylic acid esters and optionally at least one additional monomer such as (meth)acrylic acid, and mixtures thereof.

64. Composition according to either of Claims 59 and 60, characterized in that each of the
20 first and second blocks is totally derived from at least one monomer chosen from (meth)acrylic acid esters and optionally from at least one additional monomer such as (meth)acrylic acid, and mixtures thereof.

65. Composition according to one of Claims
25 59 to 64, characterized in that the additional monomer(s) represent(s) from 1% to 30% by weight

relative to the total weight of the first and/or second blocks.

66. Cosmetic composition according to any one of the preceding claims, characterized in that it
5 also comprises one or more dyestuffs chosen from water-soluble dyes and pulverulent dyestuffs, such as pigments, nacles and flakes.

67. Cosmetic composition according to any one of the preceding claims, characterized in that it
10 is in the form of a suspension, a dispersion, a solution, a gel, an emulsion, especially an oil-in-water (O/W) or water-in-oil (W/O) emulsion, or a multiple emulsion (W/O/W or polyol/O/W or O/W/O), or in the form of a cream, a paste, a mousse, a dispersion of
15 vesicles, especially of ionic or nonionic lipids, a two-phase or multi-phase lotion, a spray, a powder or a paste, especially a soft paste or an anhydrous paste.

68. Cosmetic composition according to any one of the preceding claims, characterized in that it
20 is in anhydrous form.

69. Cosmetic composition according to any one of the preceding claims, characterized in that it is a makeup or care composition for keratin materials.

70. Cosmetic composition according to one of
25 the preceding claims, characterized in that it is a lip makeup product.

71. Cosmetic composition according to one of the preceding claims, characterized in that it is an eye makeup product.

72. Cosmetic assembly comprising:

- 5 a) a container delimiting at least one compartment, the said container being closed by a closing member; and
b) a composition placed inside the said compartment, the composition being in accordance with any one of the preceding claims.

10 73. Cosmetic assembly according to Claim 72, characterized in that the container is at least partially formed from at least one thermoplastic material.

74. Cosmetic assembly according to Claim 72,
15 characterized in that the container is at least partially formed from at least one non-thermoplastic material, especially from glass or metal.

75. Assembly according to any one of Claims 72 to 74, characterized in that, in the closed position
20 of the container, the closing member is screwed onto the container.

76. Assembly according to any one of Claims 72 to 74, characterized in that, in the closed position of the container, the closing member is coupled to the
25 container other than by screwing, especially by click-fastening, bonding or welding.